



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,764	01/05/2004	Donald Michael Cardina	037-0020	2276
52218 7590 06/06/2007 ZAGORIN O'BRIEN GRAHAM LLP (037) 7600B NORTH CAPITAL OF TEXAS HIGHWAY SUITE 350 AUSTIN, TX 78731-1191			EXAMINER BARQADLE, YASIN M	
			ART UNIT 2153	PAPER NUMBER
			MAIL DATE 06/06/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/751,764

Applicant(s)

CARDINA ET AL.

Examiner

Yasin M. Barqadle

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s).

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02/18/2005.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-33 are pending.
2. This application claims the benefit of Provisional Application No. 60/527,373 filed December 5, 2003.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 28 and 32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 28 and 32 recite "a carrier wave encoded to transmit a control program..." the claimed invention calls for a signal per se which is not tangibly embodied so to be executable. According to the patent law, one may patent something that is a machine, manufacture, composition of matter or a process. However, a signal per se does not fall in any one of the categories of process, machine, manufacture or composition of matter so to be given a patentability weight.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.1 Claim 5 recites the limitation "the HLR" in line 3. There is no mention of "HLR" previously. There is insufficient antecedent basis for this limitation in the claim.

3.2 Claim 8 recites the limitation "the at least one server" in lines 1-2. There is no prior mention of an "at least one server", and it is unclear which server from the three previously mentioned servers (i.e. the central server, active server or passive server) is being referred to in the limitation. There is insufficient antecedent basis for this limitation in the claim.

3.3 Claim 18 recites the limitation "the HLR" in line 3. There is no mention of "HLR" previously. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2153

3.4 Claim 21 recites the limitation "the at least one server" in lines 1-2. There is no prior mention of an "at least one server", and it is unclear which server from the three previously mentioned servers (i.e. the central server, active server or passive server) is being referred to in the limitation. There is insufficient antecedent basis for this limitation in the claim.

3.5 Claim 27 is recites the limitation "the instructions" in line 2. There is insufficient antecedent basis for this limitation in the claim.

3.6 Claim 29 recites the limitation "the attempt" in line 1. No "attempt" was previously defined in the preceding claims. There is insufficient antecedent basis for this limitation in the claim.

3.7 Claim 29 recites the limitation "the first server" in line 2. No "first server" was previously defined in the preceding claims. There is insufficient antecedent basis for this limitation in the claim.

Claim Objections

4. Claim 1 is objected to because of the following informalities: in line 7 the claim includes "that that". It should be only one "that". Appropriate correction is required.

4.1 Claim 8 and 21 are objected to because of the following informalities: in lines 1-2 the claim includes "the at least one server includes multiple passive servers". This may read as "*multiple passive servers that are included in a single server*". *Fig. 1 shows a separate server 5 attached to multiple servers 8. Also the specification states "The central server 5 communicates with and provides instructions for the remote servers 8, 50, 60, 70 that deliver messages to the mobile devices 9. The central server 5 may host servers regionally, nationwide, and/or on a worldwide basis."* (¶ 0067). It is suggested to use the following language such as "... server communicates with multiple passive server" or "... server coupled with multiple passive server." Appropriate correction is required.

4.2 Claims 5,11,18,25 and 29 are objected to because of the following informalities: the claims contain acronyms such as HLR and MSC, which may be unclear to what they stand for. At least for consistency purpose HLR and MSC should be spelled out

Art Unit: 2153

like (STP) single transfer protocol in claim 4. Appropriate correction is required.

Drawings

5. Figure 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 2153

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 15-27 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Link et al. Publication Number WO02/080595 herein after "Link".

As per claim 15, Link teaches a centralized notification system for over the air programming (fig. 11, page 11, ¶ 0049-0050), comprising:

a central server (fig. 11, 1102) that generates a message to be delivered to a mobile device (page 11, ¶ 0049-0050); and

at least one passive server (fig. 11, 1106) located in a region in which a mobile device is homed in communication with the central server (see fig. 11, 1102 where system 1106 is in communication with BO 1102) that receives the message from the central server (page 7, ¶ 0036 and page 11, ¶ 0049-0050), the passive server in communication with a network element that communicates with the mobile device (1106 communicates with mobile device via tower 1130 or SMS 1120, page 8, ¶ 0041 to page 9, ¶ 0044 and page 11, ¶ 0049),

wherein the passive server monitors message traffic for an event that provides availability information about the mobile

Art Unit: 2153

device ("a registration is an event where a wireless device initiates contact with the wireless network 340 to alert system 340 of its presence, location and attributes." Page 8, ¶ 0038; page 8, ¶ 0041 to page 9 ¶ 0044) and downloading the message to the mobile device in response thereto (system 1106 sends updated information contained in IRDP 1104 to various wireless devices as the wireless devices register with the communication network "1120" page 11, ¶ 0050-0051).

As per claim 16, Link teaches centralized notification system recited in claim 15, wherein the availability is determined from an echo registration of a registration generated from a mobile device (page 8, ¶ 0041 to page 9 ¶ 0044 and page 11, ¶ 0051).

As per claim 17, Link teaches the centralized notification system recited in claim 15, further comprises logging results of the delivery of the message in a history database (page 5, ¶ 0018- 0019).

As per claim 18, Link teaches the centralized notification system recited in claim 15, receives the availability information about the mobile device without having to query the HLR (page 11, ¶ 0051 availability information is extracted from registration message without querying the HLR).

Art Unit: 2153

As per claim 19, Link teaches the centralized notification system recited in claim 15, wherein the message can be created in response to various parameters, including implementing at least one of: administration changes to an intelligent routing database; a system change to a subscriber's profile; and changes by an accounting system server (page 11, ¶ 0051 to page 12, ¶ 0053)

As per claim 20, Link teaches the centralized notification system recited in claim 15, wherein the central server generates and delivers the message to an active server in response to a new activation of a mobile device (page 5, ¶ 0015-0016 and page 11, ¶ 0051 to page 13 ¶ 0056).

As per claim 21, Link teaches the centralized notification system recited in claim 15, wherein the at least one server includes multiple passive servers functionally servicing a geographic region (page 1, ¶ 0002-0004 and page 5, ¶ 0015)

As per claim 22, Link teaches the centralized notification system recited in claim 21, wherein the passive servers are distributed nationally (page 1, ¶ 0003-0004).

Art Unit: 2153

As per claim 23, Link teaches the centralized notification system recited in claim 22, wherein the passive servers are distributed worldwide (page 1, ¶ 0004).

As per claim 24, Link teaches the centralized notification system recited in claim 15, wherein an echo registration is created and made available to a signal transfer point (STP) (page 9, ¶ 0043-0044 and page 10, ¶ 0045-0046. See also figs 6 and 7).

As per claim 25, Link teaches the centralized notification system recited in claim 15, wherein the event from which availability information is obtained is chosen from at least one of: monitoring individual cell towers; monitoring an STP; monitoring a server; and monitoring traffic between an MSC and an HLR (page 8, ¶ 0041 to page 10, ¶ 0047 and page 11, ¶ 0051).

As per claim 26, Link teaches the method for maintaining and managing over the air programming to a mobile device (fig. 11, page 11, ¶ 0049-0050) comprising:

generating a message in a central server that is to be downloaded to the mobile device (¶ page 7, ¶ 0036 and page 11, ¶ 0049-0050); and

delivering the message to a passive server in a region in

Art Unit: 2153

which the mobile device is homed server (see fig. 11, 1102 where system 1106 is in communication with BO 1102), monitoring message traffic for an event that provides availability information about the mobile device ("a registration is an event where a wireless device initiates contact with the wireless network 340 to alert system 340 of its presence, location and attributes." Page 8, ¶ 0038; page 8, ¶ 0041 to page 9 ¶ 0044) and automatically downloading the message in response thereto (system 1106 sends updated information contained in IRDP 1104 to various wireless devices as the wireless devices register with the communication network 1120 page 11, ¶ 0050-0051).

As per claim 27, Link teaches the method of claim 26, further comprising logging results of the delivery of the instructions in a history database (page 5, ¶ 0018- 0019. see also ¶ 0061 and ¶ 0065).

As per claim 32, this claim includes similar limitations as addressed in claim 26 above. Therefore they are rejected with the same rationale. Link Further teaches a control program usable for a centralized notification system to execute the function of claim 32 (see figs. 8-10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-14 and 28-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridges et al. US. Patent Number 6148197 hereinafter "Bridges" in view of Link et al. Publication Number ("WO 02/080595" herein after "Link").

As per claim 1, Bridges teaches a centralized notification system for over the air messaging (col. 1, lines 7-11 and col. 15, line 40-46), comprising:

a central server that generates a message to be delivered to a mobile device (col. 16, lines 22 to 28); and

an active server in communication with the central server that receives the message from the central server (col. 16, lines 30 to 35 and lines 40 to 42; col. 17, lines 1 to 12), the active server in communication with a network element that

Art Unit: 2153

communicates with the mobile device (figure 4, OTAF 100 and HLR 104; col. 7, lines 50-52; col. 17, lines 39-41), wherein the active server queries the network element to determine availability of the mobile device (col. 17, lines 39-45), wherein: if the availability of the mobile device is returned from the network device, directly routing the message to the mobile device (col. 7, lines 50-55; col. 17, line 58 to col. 18, line 7); otherwise, storing the message in the active server (col. 18, lines 13-15); and wherein the active server monitors message traffic for an event that provides availability information about the mobile device (col. 7, lines 55-56; col. 18, lines 13-17) and automatically delivers the message to the mobile device in response thereto (col. 18, lines 16-18).

Although Bridges shows substantial features of the claimed invention, he does not explicitly show a passive server that monitors message traffic for an event that provides mobile device availability information and automatically delivering the message to the mobile device in response thereto.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the system disclosed by Bridges, as evidenced by Link Publication No. WO 02/080595. In analogous art, Link whose invention is about Intelligent roaming system with over the air programming, disclose a passive

Art Unit: 2153

server (fig. 11, 1102) that monitors message traffic for an event that provides mobile device availability information (registration signal are monitored indicating device presences (page 8, ¶ 0038; page 8, ¶ 0041 to page 9 ¶ 0044) and automatically delivering the message to the mobile device in response thereto (page 11, ¶ 0050-0051). Giving the teaching of Link, a person of ordinary skill in the art would have readily recognized the desirability and the advantage of modifying Bridges by employing the delivery system of Link that waits for autonomous registration from a particular wireless device, and then, after receiving the autonomous registration, transmits information to the wireless device, as opposed to transmitting all of the updates sequentially. One ordinary skill in the art would be motivated to do so because it conserves resources of the communications network and assists in improving the delivery success rate (page 4, ¶ 0014-15).

As per claim 2, Link teaches the centralized notification system recited in claim 1, further comprises logging results of the delivery of the message in a history database (page 5, ¶ 0018-0019. see also ¶ 0061 and ¶ 0065).

As per claim 3, Link teaches the centralized notification system recited in claim 1, wherein the availability is

Art Unit: 2153

determined from an echo registration of a registration generated from a mobile device (page 8, ¶ 0041 to page 9 ¶ 0044 and page 11, ¶ 0051).

As per claim 4, Bridges teaches centralized notification system recited in claim 3, wherein the echo registration is created and made available at a signal transfer point (STP) (col. 17, lines 58-64).

As per claim 5, Link teaches the centralized notification system recited in claim 1, wherein the passive server receives the availability information about the mobile device without querying the HLR (page 11, ¶ 0051 availability information is extracted from registration message without querying the HLR).

As per claim 6, Bridges teaches centralized notification system recited in claim 1, wherein the message are created in response to various parameters, including implementing at least one of: administration changes to an intelligent routing database; a system change to a subscriber's profile; and changes by an accounting system server (col. 16, lines 37-63 and col. 17, lines 23-30).

Art Unit: 2153

As per claim 7, Bridges teaches the centralized notification system recited in claim 1, wherein the central server generates and delivers the message to an active server in response to a new activation of a mobile device (col. 7, lines 50-56 and col. 15, lines 47-58).

As per claim 8, Bridges teaches centralized notification system recited in claim 1, wherein the at least one server includes multiple passive servers functionally servicing a geographic region (col. 12, lines 59 to col. 13, line 33).

As per claim 9, Link teaches the centralized notification system recited in claim 8, wherein the passive servers are distributed nationally (page 1, ¶ 0003-0004).

As per claim 10, Link teaches the centralized notification system recited in claim 9, wherein the passive servers are distributed worldwide (page 1, ¶ 0004).

As per claim 11, Link teaches the centralized notification system recited in claim 1, wherein the event from which availability information is obtained is chosen from at least one of: monitoring individual cell towers; monitoring an STP;

Art Unit: 2153

monitoring a server; and monitoring traffic between an MSC and an HLR (page 9, ¶ 0043-0044 and page 10, ¶ 0045-0046. See also figs 6 and 7).

As per claim 12, this claim includes similar limitations as addressed in claim 1 above. Therefore they are rejected with the same rationale. Bridges further teaches a method for managing over the air programming to a mobile device (see figure 4-6 and col. 9, lines 9-16 and col. 17, line 23-30).

As per claim 13, Link method of claim 12, further comprises: determining availability information from an echo registration that is automatically sent to the passive server, wherein the echo registration is a copy of a registration generated from a mobile device (page 10, ¶ 0046).

As per claim 14, Link method of claim 12, further comprises:
logging results of the delivery of the message in a history database (page 5, ¶ 0018- 0019. see also ¶ 0061 and ¶ 0065).

As per claim 28, this claim includes similar limitations as addressed in claim 1 above. Therefore they are rejected with the

Art Unit: 2153

same rationale. Link Further teaches a control program usable for a centralized notification system to execute the function of claim 32 (see figs. 8-10).

As per claim 29, Bridges teaches method of claim 28, wherein the attempt to locate and deliver the message is performed by the first server in which an HLR is queried for a registration that provides availability information about the mobile device (col. 17, lines 39-45).

As per claim 30, Link method of claim 28, further comprises: determining availability information from an echo registration automatically sent to the network element, wherein the echo registration is a copy of a registration generated from a mobile device (page 10, ¶ 0046).

As per claim 31, Link method of claim 28, further comprises: logging results of the delivery of the message in a history database (page 5, ¶ 0018- 0019. see also ¶ 0061 and ¶ 0065).

As per claim 33, this claim includes similar limitations as addressed in claim 1 and 28 above. Therefore they are rejected with the same rationale. Bridges further teaches updating an

Art Unit: 2153

intelligent routing database (IRDB) in a mobile device (see fig. 4 and col. 9, lines 9-16 and col. 17, line 23-30).

Conclusion

8. The prior made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Barqadle whose telephone number is 571-272-3947. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may

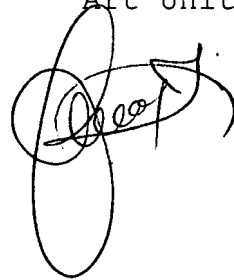
Art Unit: 2153

be obtained from either private PAIR or public PAIR system. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YB

Yasin Bargadle

Art Unit 2153

A handwritten signature in black ink, appearing to read 'Yasin Bargadle', enclosed within a large, loopy circular flourish.